Atty. Dkt. No.: EPI3007F
(formerly TSRI 184.2C2)

IN THE CLAIMS

The pending claims are reproduced below. Please amend claim 92 as shown below.

Claims 1-14 (cancelled)

15. (Previously pending) The method of claim 92, wherein said immunoglobulin molecule is administered as part of a composition, which composition further comprises a material having nutritional value.

16. (Previously pending) The method of claim 15, wherein said material having nutritional value is from a plant or an animal.

17. (Previously pending) The method of claim 92, wherein said immunoglobulin molecule is administered as part of a composition, which composition further comprises a physiologically inert material.

18. (Previously pending) The method of claim 92, wherein said immunoglobulin heavy chain is a fragment of a full-length heavy chain.

19. (Previously pending) The method of claim 92, wherein said immunoglobulin light chain is a fragment of a full length light chain.

20. (Previously pending) The method of claim 92, wherein said preselected antigen is from a pathogen.

21. (Previously pending) The method of claim 20, wherein said pathogen is selected from bacterial, viruses, or parasites.

22. (Previously pending) The method of claim 20, wherein the pathogen is E. Coli, Salmonellae, Vibrio cholerae, or Salmonellae typhimurium.

23. (Previously pending) The method of claim 92, wherein the plant cells are from a monocot.

24. (Previously pending) The method of claim 92, wherein the plant cells are from a dicot.

25. (Previously pending) The method of claim 92, wherein the leader sequence is a non-native leader sequence.

26. (Previously pending) The method of claim 92, wherein the leader sequence is a yeast leader sequence.

27. (Previously pending) The method of claim 92, wherein the leader sequence is a plant leader sequence.

28. (Cancelled)

29. (Previously pending) The method of claim 92, wherein the immunoglobulin heavy chain comprises at least a portion of a constant region and said constant region is from an IgA heavy chain.

30. (Previously pending) The method of claim 92, wherein the immunoglobulin heavy chain comprises at least a portion of a constant region and said constant region is from an IgG heavy chain.

31. (Previously pending) The method of claim 92, wherein said heavy chain is full length.

32. (Previously pending) The method of claim 92, wherein said light chain is full length.

33. (Previously pending) The method of claim 92, wherein said immunoglobulin molecule is glycosylated and free from detectable sialic acid residues.

34. (Previously pending) The method of claim 92, wherein said immunoglobulin molecule is a fragment of a full-length immunoglobulin.

35. (Previously pending) The method of claim 34, wherein said fragment is a Fab.

36. (Previously pending) The method of claim 34, wherein said fragment is a Fab'.

37. (Previously pending) The method of claim 34, wherein said fragment is a $F(ab')_2$.

38. (Previously pending) The method of claim 34, wherein said fragment is an Fv.

39. (Previously pending) The method of claim 92, wherein the plant cells are alga cells.

40. (Previously pending) The method of claim 92 wherein said plant cells are in the form of a plant.

41. (Previously pending) A method of passively immunizing a human or non-human animal subject against a preselected antigen by administering an immunoglobulin produced by transgenic plant cells, said method comprising obtaining a formulation comprising an antigen-specific immunoglobulin by processing plant cells containing nucleotide sequences encoding an immunoglobulin heavy chain and an immunoglobulin light chain wherein said nucleotide sequences also encode a leader sequence for said heavy chain and said light chain and wherein each leader sequence forms a secretion

signal that is cleaved from each of said immunoglobulin heavy chain and light chain polypeptides following proteolytic processing and administering to said subject a prophylactic amount of said formulation comprising said antigen-specific immunoglobulin produced from transgenic plants.

42. (Previously pending) The method of claim 41, wherein said immunoglobulin heavy chain is a fragment of a full-length heavy chain.

43. (Previously pending) The method of claim 41, wherein said heavy chain is full length.

44. (Previously pending) The method of claim 41, wherein said immunoglobulin light chain is a fragment of a full length light chain.

45. (Previously pending) The method of claim 41, wherein said light chain is full length.

46. (Previously pending) The method of claim 41, wherein said heavy chain and said light chain are full length.

47. (Previously pending) The method of claim 41, wherein said heavy chain is a fragment of a full length heavy chain and said light chain is a fragment of a full length light chain.

48. (Previously pending) The method of claim 41, wherein said heavy chain includes at least a portion of a constant region and wherein said constant region is from an IgA antibody.

49. (Previously pending) The method of claim 41, wherein said heavy chain includes at least a portion of a constant region and wherein said constant region is from an IgG antibody.

50. (Previously pending) The method of claim 41, wherein said heavy chain includes at least a portion of a constant region and wherein said constant region is from an IgM antibody.

51. (Previously pending) The method of claim 41, wherein said immunoglobulin molecule is glycosylated and free from detectable sialic acid residues.

52. (Previously pending) The method of claim 41, wherein said immunoglobulin is a fragment of a full-length immunoglobulin.

53. (Previously pending) The method of claim 52, wherein said fragment is a Fab.

54. (Previously pending) The method of claim 52, wherein said fragment is a Fab'.

55. (Previously pending) The method of claim 52, wherein said fragment is a F(ab')2.

56. (Previously pending) The method of claim 52, wherein said fragment is an Fv.

57. (Previously pending) The method of claim 41, wherein said preselected antigen is from a pathogen.

58. (Previously pending) The method of claim 57, wherein said pathogen is selected from bacteria, viruses, or parasites.

59. (Previously pending) The method of claim 47, wherein said pathogen is E. Coli, Salmonellae, Vibrio cholerae, or Salmonellae typhimurium.

60. (Previously pending) The method of claim 41, wherein the plant cells are from a monocot.

61. (Previously pending) The method of claim 41, wherein the plant cells are from a dicot.

62. (Previously pending) The method of claim 41, wherein the plant cells are from an alga.

63. (Previously pending) The method of claim 41, wherein the leader sequence is a non-native leader sequence.

64. (Previously pending) The method of claim 41, wherein said immunoglobulin is formulated with a pharmaceutically acceptable carrier.

65. (Previously pending) The method of claim 41, wherein said plant cells are in the form of a plant.

66-82 (Cancelled).

83. (Previously pending) A method of passively immunizing a human or non-human animal subject against a preselected antigen by administering an immunoglobulin produced by transgenic plant cells, said method comprising:

(a) preparing plant cells containing

nucleotide sequences encoding a dual chain immunoglobulin product comprising an immunoglobulin heavy chain and an immunoglobulin light chain wherein said nucleotide sequences also encode a leader sequence for each of said heavy chain and light chain, and antigen-specific immunoglobulin encoded by said nucleotide sequence, wherein the leader sequence forms a secretion signal that is cleaved from each of said immunoglobulin light and heavy chain following proteolytic processing;

(b) isolating antigen specific immunoglobulin from the plant cells; and

(c) administering to said subject a prophylactic amount of said antigen specific immunoglobulin.

84. (Previously pending) The method of claim 83, wherein said antibody is full length.

85. (Previously pending) The method of claim 83, wherein said immunoglobulin is a fragment of a full-length immunoglobulin.

86. (Previously pending) The method of claim 83, wherein said heavy chain includes at least a portion of a heavy chain constant region and wherein said constant region is from an IgM antibody.

87. (Previously pending) The method of claim 83, wherein said heavy chain includes at least a portion of a constant region and wherein said constant region is from an IgG antibody.

88. (Previously pending) The method of claim 83, wherein said heavy chain includes at least a portion of a constant region and wherein said constant region is from an IgG antibody.

89. (Previously pending) The method of claim 83, wherein said preselected antigen is from a pathogen.

90. (Previously pending) The method of claim 89, wherein said pathogen is selected from bacteria, viruses, or parasites.

91. (Previously pending) The method of claim 89, wherein said pathogen is E. Coli, Salmonellae, Vibrio cholerae, or Salmonellae typhimurium.

92. (Presently amended) A method of passively immunizing a human or non-human animal subject against a preselected antigen using an immunoglobulin molecule produced in transgenic plants, said method comprising

(a) obtaining a source of antigen-specific immunoglobulin from transgenic plant cells producing antigen specific immunoglobulin, said plant cells containing nucleotide **sequences** ~~sequence~~ encoding an immunoglobulin heavy chain polypeptide and an immunoglobulin light chain polypeptide wherein said nucleotide sequences also **encode** ~~encodes~~ a leader sequence for each polypeptide wherein each leader sequence forms a secretion signal that is cleaved from each of said immunoglobulin heavy chain and light chain polypeptides following proteolytic processing; and

(b) administering a prophylactic amount of said antigen-specific immunoglobulin molecule to said subject, thereby passively immunizing a human or non-human animal subject against a preselected antigen.